

## **WORKSHOP ON “PROPENSITY SCORES, INSTRUMENTAL VARIABLES AND PRIOR EVENT RATE CORRECTION: TOOLS TO ADJUST FOR CONFOUNDING BY INDICATION IN OBSERVATIONAL STUDIES”**

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### **AIMS:**

- To improve the knowledge on several methods used to adjust for confounding by indication in observational studies and, particularly, using data from primary care computerized medical records.
- To give the tools to use these methods in STATA and R using “lab sessions”.

### **WHO SHOULD ATTEND:**

- Researchers involved in the use of data coming from computerized medical records.

### **LECTURERS:**

**Dr Andrew Judge, PhD;** senior statistician from the Nuffield Orthopaedics Centre, University of Oxford (UK).

**Dr Daniel Prieto-Alhambra, MD, PhD;** research fellow at the Nuffield Orthopaedics Centre (University of Oxford, UK). Experienced in the analysis of data from GPRD and involved in the set up of the Spanish SIDIAP database.

**Maria del Mar García, MD, PhD;** senior researcher at the IDIAP Jordi Gol and at the SIDIAP database.

### **LOCATION:**

IDIAP Jordi Gol, room “Sala de formación”

C/Gran Vía 591, ático (top floor)

Barcelona (Spain)

### **DATES:**

29th-30th November 2011.

1st day:10:00 to 19:00h; 2nd day: 9 to 14:00h.

### **LANGUAGE:**

The full course will be taught in English.

## PRELIMINARY OUTLINE:

### First day:

9:00 Optional “CRASH” introductory course on Stata for Stata non-users

10:00 Registration

10:15 Concepts and methods to adjust for “confounding by indication”  
(Dr. Andrew Judge and Dr Daniel Prieto-Alhambra)

- Definition of “confounding by indication”
- Introduction to available methods of adjustment
- *Propensity scores*

12:15 Lab session: propensity score matching [Stata and R].  
(Dr. Daniel Prieto-Alhambra and Dr. Andrew Judge)

13:30-14:30 Lunch break

14:30 Second session. Dr Andrew Judge

- Introduction to *Instrumental variables*

16:00-16:30 Coffee break

16:30 Lab session: propensity score adjustment and some examples on the use of instrumental variables [Stata and R]. (Dr Daniel Prieto-Alhambra and Dr Andrew Judge)

### Second day:

8:30 Third session. Dr Andrew Judge

- *Prior event rate correction (PERR)*

9:45 Lab sessions: using prior event rate correction [Stata and R]. (Dr Daniel Prieto-Alhambra and Dr Andrew Judge)

11:45-12:15 Coffee break

12:15 Fourth session: Conclusions

14:00 END

## REGISTRATION:

17 places available.

Free registration, only available to redIAPP, IDIAP Jordi Gol and SIDIAP staff.

For registration contact to: Anna Moleras [amoleras@idiapigol.org](mailto:amoleras@idiapigol.org)